DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-006076 Address: 333 Burma Road **Date Inspected:** 15-Feb-2009

City: Oakland, CA 94607

OSM Arrival Time: 1845 **Project Name:** SAS Superstructure **OSM Departure Time:** 645 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Fabrication

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector Mr. Paul Dawson arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

CWI: Mr. Li Jia

OBG Bay 12

This QA Inspector performed random ultrasonic (UT) inspections of approximately 10 percent length of OBG deck plate welds SP545-001-011, SP545-001-013, SP545-001-015, SP545-001-017, SP545-001-071, SP545-001-082, SP545-001-093 and SP545-001-104. These welds had previously been ultrasonically inspected and accepted by ZPMC inspection personnel and the welds are listed on ZPMC Notification of Witness Inspection document 001996. The QA Inspector observed the welds that were ultrasonically inspected by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on this inspection see the TL6027 Ultrasonic Test Report.

This QA Inspector performed random magnetic particle (MT) inspections of approximately 10 percent length of OBG deck plate welds SP545-001-011, SP545-001-013, SP545-001-015, SP545-001-017, SP545-001-071, SP545-001-082, SP545-001-093 and SP545-001-104. These welds had previously been MT inspected and accepted by ZPMC inspection personnel and the welds are listed on ZPMC Notification of Witness Inspection

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document 001995. The QA Inspector observed the welds that were MT inspected by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on this inspection see the TL6028 Magnetic Particle Test Report.

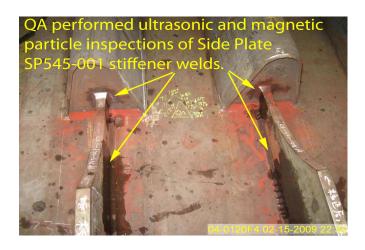
The QA Inspector performed random visual inspections of four weld relief holes at the ends of Deck Plate DP545-001 stiffener welds. All four of these holes appears to have a size that varies between 45 mm to 50 mm, and they appear to comply with project specifications.

ZPMC QC representative Mr. Li Xin Yang presented the QA Inspector with a "Notification of Witness Inspection" request #1995 that indicates ZPMC has completed magnetic particle inspections of a partial amount of fillet welds on deck panel DP545. The QA Inspector informed Mr. Li Xiu Yang that the "Notification of Witness Inspection" request lacks the weld numbers that need to be inspected, and that these are complete joint penetration welds instead of fillet welds. Mr. Li Xiu Yang said he will revise the "Notification of Witness Inspection" request to add the weld numbers.

OBG Bay 7

The QA Inspector observed ZPMC welder Mr. Shi Wei stencil 53859 is using the shielded metal arc process to make fillet tack welds on OBG side plate stiffener welds SP342-001-016. The QA Inspector observed the base material where the tack welding is being made is being preheated with a torch. Items observed by the QA Inspector appear to comply with project specifications.

The QA Inspector observed ZPMC welders Mr. Liv Nujin stencil 215259 is using the shielded metal arc process to make fillet tack welds on OBG side plate stiffener welds SP342-001-015. The QA Inspector observed the base material where the tack welding is being made is being preheated with a torch. Items observed by the QA Inspector appear to comply with project specifications.



Summary of Conversations:

See above.

Comments

WELDING INSPECTION REPORT

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer